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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,405	09/29/2000	WALTER W. BUTLER	K35A0458	1929

26332 7590 06/14/2002

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EXAMINER

CASTRO, ANGEL A

ART UNIT PAPER NUMBER

2651

DATE MAILED: 06/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/676,405

Applicant(s)

BUTLER, WALTER W.

Examiner

Angel A. Castro

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of invention I in Paper No. 4 is acknowledged.
2. Claims 5-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention II, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Helms et al (U.S. Pat. 3,700,855).

Regarding claim 1, Helms et al discloses a disk drive with improved shrouding (figures 1-5), comprising a disk 14; a motor 20 for rotating the disk; a head (column 3, line 35); an actuator arm for actuating the head radially over the disk (column 3, line 36); a base 82; and a cover 28, 82 attached to the base to form a head disk assembly chamber, the cover comprising an inner surface 30 (the part of cover 82 also has an inner surface) and an outer surface; and a shroud 22 extending axially from the inner surface into the head disk assembly chamber

substantially enveloping the periphery of the disk, including at least part of the periphery coextensive with the actuator arm, to provide radial shrouding of the disk.

Regarding claim 2, Helms discloses that the shroud is a separate piece adhered to the inner surface of the cover (see figures 2 or 5).

Regarding claim 3, Helms discloses the cover and shroud described above.

As the claims are directed to a disk drive, per se, the method limitations appearing in lines 1-2 of claim 3 has only been accorded weight to the extent that it affects the structure of the completed disk drive. Note that determination of patentability in 'product-by-process' claims is based on product itself, even though such claims are limited and defined by process [i.e., "form molded"], and thus product in such claim is unpatentable if it is the same as, or obvious form, product of prior art, even if prior product was made by a different process", *In re Thorpe, et al.*, 227 USPQ 964 (CAFC 1985). Furthermore, note that a "product-by-process" claim, although reciting subject matter of claim in terms of how it is made [i.e., "form molded"] is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations", *In re Hirao and Sato*, 190 USPQ 685 (CCPA 1976).

5. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendriks (U.S. Pat. 6,091,570).

Regarding claim 1, Hendriks discloses a disk drive (figures 4-5), comprising a disk 40; a motor (not shown) for rotating the disk; a head 28; an actuator arm 20 for actuating the head radially over the disk; a base (shown but labeled); and a cover 60 attached to the base to form a head disk assembly chamber, the cover comprising an inner surface (shown but not labeled)

and an outer surface; and a shroud (shown but not labeled in figure 5) extending axially from the inner surface into the head disk assembly chamber substantially enveloping the periphery of the disk, including at least part of the periphery coextensive with the actuator arm, to provide radial shrouding of the disk.

Regarding claim 4, Hendriks discloses that the cover further comprises a substantially C-shaped depression positioned substantially concentric over the disk to provide axial shrouding (see figure 5).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boutaghou (U.S. Pat. 5,696,649) discloses an elastic insert shroud to provide maximum effective shrouding in high speed disk drives; Brown et al (U.S. Pat. 5,124,856) discloses a magnetic recording device with unitary filter medium; Campbell (U.S. Pat. 4,581,668) discloses a disk contour cover having air filtration section; Koizumi (JP 2000-040340) discloses a magnetic disk device (see figure 15); Iida et al (JP 59-218682) discloses a magnetic disk device).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A. Castro whose telephone number is 703-308-8435. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-8435 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Angel Castro, Ph.D.
June 11, 2002



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600